

TDD #10-8407-07
HYDROCHLORIC ACID SPILL RESPONSE
SEATTLE, WASHINGTON

19-20 JULY 1984

At 1335 hours on 19 July 1984, the Region X EPA Emergency Response Team (ERT) informed the Region X Technical Assistance Team (TAT) of a spill of dilute (thirty percent) hydrochloric acid from a leaking tank truck in the Ballard district of Seattle, Washington. Jerry Portele and Megan Davis (TAT) accompanied Carl Kitz (ERT) to the site. Approximately 600 gallons of acid had been spilled on the soil around Ace Galvanizing Company. Ace Galvanizing is located at 621 NW 41st Avenue on a dead end street in an industrial area bordering the Lake Washington Ship Canal. The shift manager at Ace Galvanizing, Neil Mertz, notified the Seattle Fire Department of the spill.

The following personnel were onscene when EPA and TAT personnel arrived at 1415 hours on 19 July:

- R.B. Bower - Seattle Fire Department Chief
- T. D. Bruckshen - Seattle Fire Department Battalion Chief
- Jack Sime - Seattle Fire Department Public Relations
- Dennis Fenstermaker - Seattle Fire Marshall
- Bruce Burrow - Metro Industrial Waste Investigator
- Neil Mertz - Ace Galvanizing, Shift Manager
- Tom Throop - Widing Transport, driver of leaking truck

Several firefighters and the Haz/Mat Team from the Seattle Fire Department were also at the site.

T. Throop, driver of a 5,000 gallon tank truck owned by Widing Transport, was preparing to deliver 1,500 gallons of acid to the Ace Galvanizing company's holding tanks at approximately 1230 hours. As T. Throop pressurized the tank, acid began leaking from a split in a welded seam on the tank. T. Throop immediately informed personnel working inside Ace Galvanizing of the leak and the building was evacuated. T. Throop drove the leaking truck forward and off the

road to elevate the rear of the truck. This action may have caused the liquid level in the tank to fall below the burst weld, because the tank stopped leaking at this point. Or the tank may have stopped leaking as a result of a split in the tank liner that spread as the tank was pressurized and then resealed as the excess pressure dissipated. T. Throop estimated that 500 to 600 gallons of acid had spilled on the street and soil around Ace Galvanizing. The acid drained downhill to a gully next to the wooden walls of Ace Galvanizing. The acid was able to seep through the walls because the wood boards were warped and loosely nailed together. Personnel at Ace Galvanizing put on respirators and flushed the acid out of the building with water. The acid flowed toward a concrete containment pit. The overflow pipe from the containment pit led to the Lake Washington Ship Canal, fifty feet south of Ace Galvanizing. N. Mertz lowered a portable sump pump into the containment pit and pumped the acid to a holding tank. The sump pump broke at 1450 hours and an Ace Galvanizing employee was sent to purchase a new one. To prevent the containment pit from overflowing into the canal, firemen contained the draining acid with small berms of dirt. N. Mertz estimated that less than ten gallons of acid escaped from the containment pit overflow to the Lake Washington Ship Canal. The pH of the contents of the containment pit was less than one.

The Seattle Fire Department directed that the remaining contents of the Widing Truck be transferred to a tank truck owned by Resource and Recovery (RR). At 1450 hours Rod Widing, owner of Widing Transport, arrived at the site and indicated that his crew would neutralize the contaminated soil with soda ash, and remove the soil early the next day. R. Widing hired a guard to ensure that unauthorized personnel did not enter the site that night. The guard was onscene at 1750 hours.

At 1625 hours a Widing representative arrived with 1,000 pounds of soda ash. The soda ash was spread over the contaminated soil, sprinkled with water, mixed

as much as possible, and then a second layer of soda ash was applied.

At 1845 hours the contents of the Widing tank truck had been transferred to the Resource and Recovery truck. The RR truck pumped 1,500 gallons of acid to the Ace Galvanizing holding tank, and the balance of the load (approximately 2,500 gallons) was sent to the Ace Galvanizing facility in South Park, Washington. The Widing tank truck was sent to the Widing Maintenance facility in Midway, Washington.

At 1800 hours most of the acid had drained out of the Ace Galvanizing building and personnel inside the building had resumed normal operations. The pH of the containment pit at 1800 hours was between one and two. TAT personnel departed the site at 1930 hours.

On 20 July 1984, at 0855 hours P. Grega (TAT) and John Sainsbury (ERT) returned to the site to monitor the removal of the contaminated soil. P. Grega noted that there was no acid smell or any liquid observable. R. Widing instructed his crew to place the contaminated soil into metal bins provided by Ace Galvanizing. The soil was replaced with gravel provided by R. Widing. TAT personnel exited the site at 0930 hours.

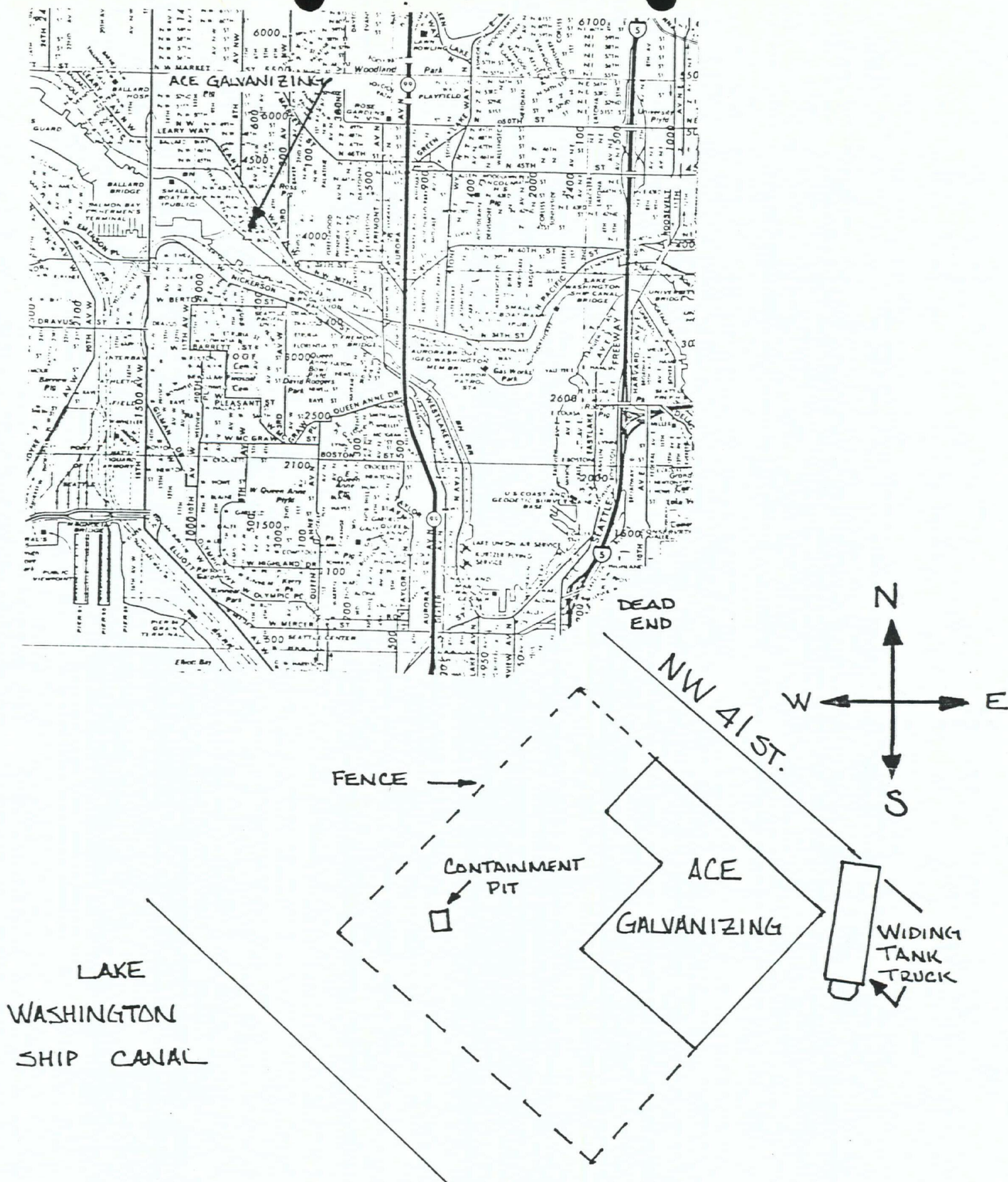


FIGURE 1
LOCATION OF ACE GALVANIZING
SEATTLE, WASHINGTON

PHOTOGRAPHS
TDD #10-8407-07
EMERGENCY RESPONSE TO ACID SPILL
SEATTLE, WASHINGTON

Photo 1. Widening transport Truck location after T. Throop moved the truck off the pavement. The building is the northwest corner of Ace Galvanizing

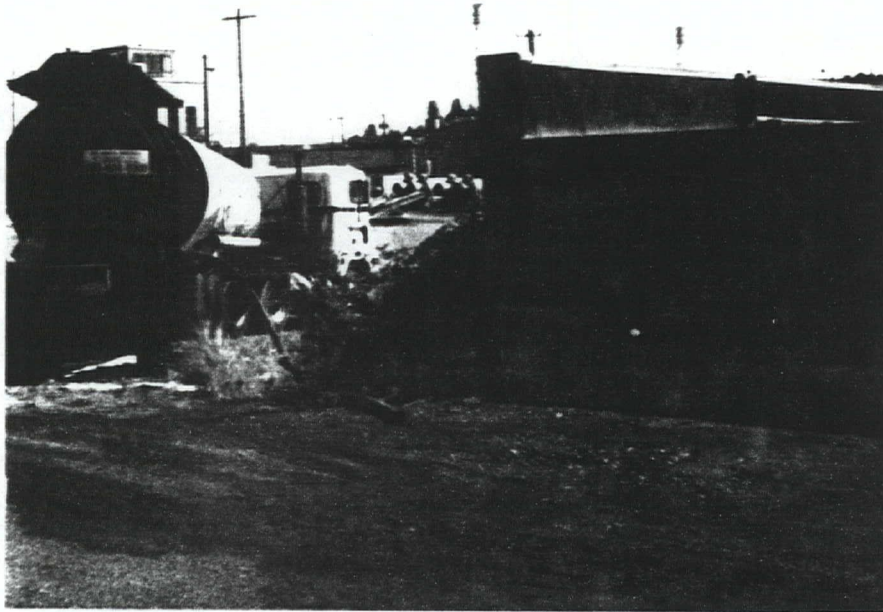


Photo 2. Acid and water draining out of the Ace Galvanizing building toward the containment pit.

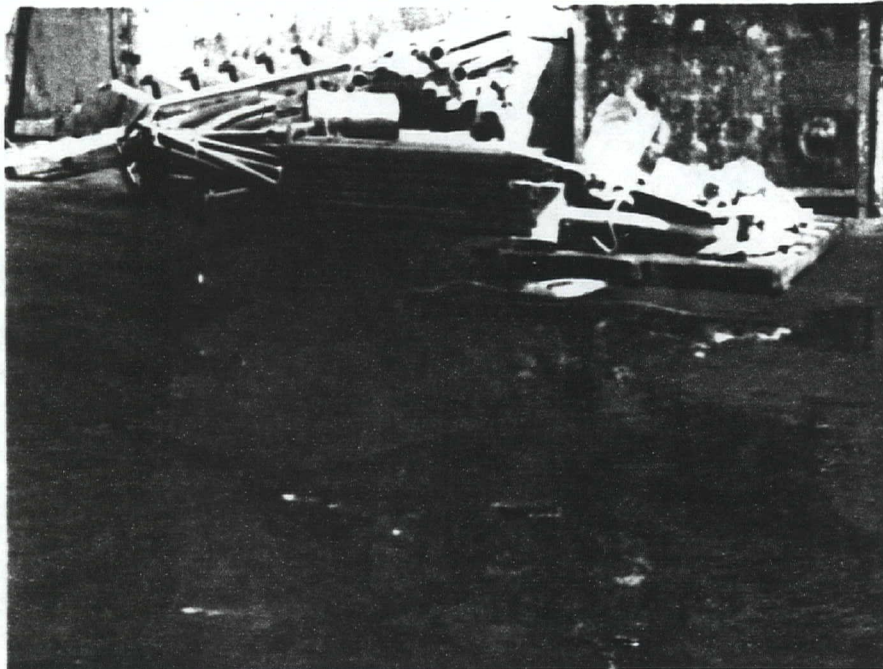


Photo 3. Neil Mertz lowering the portable sump pump into the containment pit.



Photo 4. Contents of the Widing truck being pumped into the Resource and Recovery Truck.

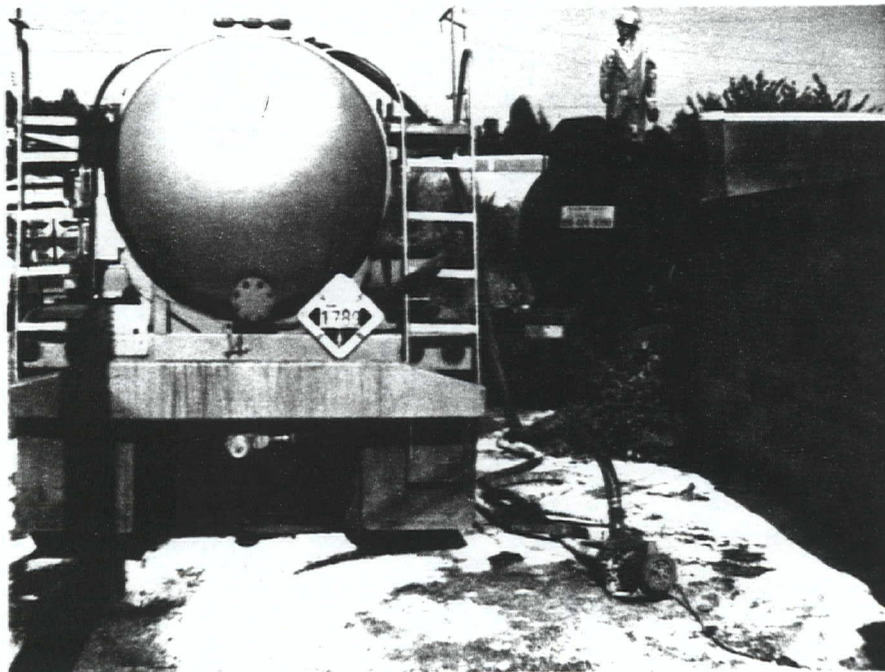


Photo 5. Soda Ash being spread on the contaminated soil.

